# **Conclusions**

1. As we have described in the previous sections of this report, we successfully implemented a simple circuit to drive a DC Motor with a manually controllable output voltage. We learned many lessons as a team about the design and implementation of this project. It required significant effort throughout the semester, with several critical design aspects being covered in class very late in the semester (e.g. thermal design & gate drive circuits—although we found a circuit where this last topic was not an issue). Not everything was done as well as we would have liked, and if we were doing it over again, there are certainly things we would do differently.
2. In spite of the shortcomings in our project work, we are proud of what we have accomplished. The circuit that we implemented was very simple, and as far as we know unique among all the designs in the class, both past and present. We implemented our circuit and had it ready to test driving the motor load before it seems that many teams had begun much work on assembling their circuits. Sometimes it is the first product to market—rather than the best product—that wins market share. In the future, perhaps a “first to market” bonus could be considered for the team(s) that successfully test earliest in the semester.